

Patent Claims

1. Relative pressure measuring transmitter, comprising:

- 5 - a housing (7);
- an insert (17) arranged in the housing (7);
- a gap (23) existing between the housing (7) and the insert (17);
- a relative pressure sensor (5); and,
- connected to the relative pressure sensor (5), a reference pressure
- 10 supply line (29), which
- leads into the insert (17),
- vents on an outer wall of the insert (17), and
- has an interior, which is connected with the gap (23) via an opening in the insert (17);
- 15 - wherein a bore (43) passes through the housing (7), for placing the gap (23) in communication with an environment of the relative pressure measuring transmitter.

2. Relative pressure measuring transmitter as claimed in claim 1,

20 wherein the insert (17) comprises a moisture-resistant material, especially a plastic.

3. Relative pressure measuring transmitter as claimed in 1, wherein, in the interior of the insert (17), an electrically conductive layer (49) is

25 provided, which encloses an inner space of the insert (17).

4. Relative pressure measuring transmitter as claimed in 1, wherein the gap (23) is bounded by two seals (25) compressed between the housing (7) and the insert (17).

5. Relative pressure measuring transmitter as claimed in 1, wherein a direct connection in the gap (23) between the bore (43) and the opening extends over a circular segment about a longitudinal axis (L) of the insert (17) or the housing (7).

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6. Relative pressure measuring transmitter as claimed in 1, wherein the bore (43) in the housing (7) is located on a side of the insert (17) lying opposite to the opening.

10 7. Relative pressure measuring transmitter as claimed in 1, wherein the bore (43) has a length of at least six millimeters, and a pin (46) is inserted into the bore (43).

8. Relative pressure measuring transmitter as claimed in 1, wherein the
15 opening is closed by a moisture-rejecting, gas-permeable filter (45).